

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: Thomas G. and Patricia S. Agnew
781 Lower Sweet Grass Rd
Big Timber, MT 59011
2. Type of action: Application to Change an Existing Irrigation Water Right
3. Water source name: Sweet Grass Creek
4. Location affected by project: W2 Sec. 9 and NW Sec. 16, T1N, R16E, Sweet Grass County.
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant proposes to change the place of use from 192 claimed acres of flood irrigation to 216 acres of sprinkler irrigation. The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.
6. Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

Montana Natural Heritage Program
Montana Department of Fish Wildlife & Parks (MFWP)
Montana Department of Environmental Quality (MDEQ)

Endangered-Threatened Species
Dewatered Stream Information
TMDL Information

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: no impact

Sections of Sweet Grass Creek are identified as chronically and periodically dewatered. The Applicants proposed to decrease their diversion from 6 CFS to 3.75 CFS after their ditch is initially filled for the remainder of the irrigation season, leaving more water instream than was historically. The Applicants also propose to measure their diversion to ensure they do not exceed their historic use. There will be no increase in use from this proposed change; this use should not affect any dewatered streams.

Water quality - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: no impact

Sweet Grass Creek is listed on the MDEQ 303(d) list as Water Quality Category 4C. The identified threats or impairments result from pollution categories such as dewatering or habitat modification and, thus, a TMDL is not required. The source as listed as fully supporting drinking water and agriculture, not fully supporting aquatic life and insufficient information for primary contact recreation. This proposed change should improve water quality due to the proposed increase in instream flow.

Groundwater - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: no impact

This application does not include a groundwater component. The conversion from flood to sprinkler will likely decrease deep percolation from historic flood irrigation however, the Applicants would be allowed to change method without authorization from the Dept. This application is before the Dept. because there is a change in place of use.

DIVERSION WORKS - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: no impact

The diversion dam, headgate and ditches are already in place and in use. The change in place of use will not affect channels, flows, barriers, riparian areas, dams or well construction.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: No Impact

The Natural Heritage Program identified the following species of concern and special status species, within the project area: Hoary Bat, Little Brown Myotis, Great Blue Heron, Greater Sage-Grouse, Bobolink, Bald Eagle and Yellowstone Cutthroat Trout. The State of Montana, Office of the Governor has issued Executive Order No. 12-2015 creating the Montana Sage Grouse Oversight Team and the Montana Sage Grouse Habitat Conservation Program. The proposed place of use falls within currently mapped general sage grouse habitat. This application was received prior to the effective date of the Order and is not subject to the core area stipulations. This area is already actively farmed. There should be no change in affects to Sage Grouse due to this project.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: no impact

This project does not involve any wetlands.

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: no impact

This project does not involve any ponds.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: no impact

The project area is comprised of several varieties of soil including clays and loams. A description of the soils is in the project file. This project is to change the place of use for an existing irrigation system. There is very low likelihood of soil degradation, alteration of stability or moisture content, or saline seep due to this proposed use of water.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: no impact

The project area is already being farmed; the applicant is expected to prevent the establishment or spread of noxious weeds on their property.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: no impact

There should be no deterioration of air quality due to increased air pollutants from this proposed project.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: no impact

NA – project not located on State or Federal Lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: no impact

There should be no significant impacts on other environmental resources of land, energy or water from this proposed use.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: no impact

This proposed use is not inconsistent with locally adopted environmental plans and goals for Sweet Grass County.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: no impact

The project is located in an area that is actively farmed; this project should have no impact on recreational or wilderness activities.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: no impact

There should be no significant impact on human health from this proposed use.

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes___ No X___ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: no impact

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact.
- (b) Local and state tax base and tax revenues? No significant impact.
- (c) Existing land uses? No significant impact.
- (d) Quantity and distribution of employment? No significant impact.
- (e) Distribution and density of population and housing? No significant impact.
- (f) Demands for government services? No significant impact.
- (g) Industrial and commercial activity? No significant impact.
- (h) Utilities? No significant impact.
- (i) Transportation? No significant impact.
- (j) Safety? No significant impact.
- (k) Other appropriate social and economic circumstances? No significant impact.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts None identified.

Cumulative Impacts None identified.

- 3. *Describe any mitigation/stipulation measures:*** The Applicants will be required to measure their water use and cease diversion once they reach their historic diverted and consumed amounts. The applicant would be required to cease diverting water if a call is made by a senior water user.
- 4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to***

consider: The no action alternative would mean that the applicant could not expand their place of use and could continue to irrigate historic acreage.

PART III. Conclusion

1. Preferred Alternative To authorize the change in place of use.

2 Comments and Responses

3. Finding:

Yes___ No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant impacts were identified. No EIS required.

Name of person(s) responsible for preparation of EA:

Name: Christine Schweigert

Title: Water Resources Specialist

Date: August 8, 2016